WHAT on earth is this book for? Is it just that we are trying to be grown-ups, like the physicians and surgeons? General practice encompasses most of medicine. Surely the ludicrous hubris of trying to encapsulate the subject in a book is matched only by the equally farcical notion that there can be any such thing as a practitioner of all medicine?

The question of whether this book can justify its existence is closely related to the question of whether there can be such a thing as a generalist in an age of modern, technological medicine. If general practice is merely second-rate medicine, then this book is necessarily superficial froth — like a strip cartoon version of War and Peace.

Fifteen years ago I made my decision to enter general practice. I told my boss of my decision. He was an elegant Italian professor of cardiology. He looked at me with the mildly perplexed air of someone who tans easily and eats guava fruit for breakfast. It was clear that, gazing down from his Olympian world of international conferences and celebrity private patients, he thought I was deranged. General practice was too far below the stars, and too close to the rugged and dusty terrain of life, to register on his radar at all. There have been plenty of times in the subsequent years, plagued by budgets and hectoring managers, when I have wondered if he was right. Consequently, it was with a flutter of mild existential doubt that I turned to review the contents page of this book.

The textbook is divided into two volumes. The first deals with the principles and concepts that, to a considerable extent, characterise general practice as a discipline. The second volume deals with the clinical problems that general practice shares with other disciplines.

When I took leave of my tanned and sculpted professor and started my trainee year I was still, I think, a bit of a hard-nosed physician. My practice was then, and is still now, rather unfashionably centred around the notion of the diagnosis. I remember being told, and accepting, that it is important to learn to live with uncertainty of diagnosis in general practice. But I considered then, and now, that the discipline of maintaining a differential diagnosis keeps that uncertainty within safe boundaries.

Because of this clinical bias I was a little surprised to realise that the areas that have really come to fascinate me in general practice were all in the first volume of this tome rather than the second. This realisation, together with the fact that I hugely enjoyed cleaning the patio this weekend with my new power hose, has forced me to acknowledge that I am now definitely middle aged and will henceforth wear sports jackets patched at the elbows.

The first volume (now, in middle age, my favourite) does have some fascinating essays if, like me, you live a very narrow life. It is possible to dip in and find chapters on illness behaviour, the communication of risk and the nature of clinical judgement. There are thoughtful pieces on everything from the principles of screening, to medicolegal standards expected in general practice. There are summaries on methods of qualitative and quantitative research. For the training practice there are chapters on all those irritating checklists beloved of video markers (although even this monolithic work does not clarify when you are, or are not, responding to a consultation cue).

This wealth of information can be found elsewhere in journals and books. But this is the only place that I have found it in one place, and, to be frank, so clearly written. There is remarkably little of the turbid jargon that one finds even in mainstream journals. In particular, there is a refreshing absence of the apparently impenetrable sociology or psychology jargon that mars so many commentaries on medicine. The editors seem to have given the authors an instruction to summarise their area of expertise clearly in 4000 words without academic obfuscation.

A lump of paper weighing several kilograms is only relevant in an electronic age in as far it deals with the eternal verities. Much of the detail of the management of chronic disease, which now makes up such a major part of general practice, will change. New trials will come along and slightly hectoring enthusiasts will flash up their endless PowerPoint bar charts showing us that we are now doing it wrong. The still points in this turning world are the principles dealt with in volume 1 of this book and the processes involved in making a diagnosis. These things do not change and are the reason why the book is not merely a collection of tidal ephemera to be swept away by the information ripide.

One of the things that is striking to me about this book is the astonishing level of thought and consideration that seems to have gone into it. When I pick up most textbooks I estimate that 80% has been regurgitated from
I am biased. I am utterly in awe of those polymaths who write elegant, witty English about their particular technical expertise. Fortey is certainly one. His subject is our earth and how it got to be the way it is.

The earth, day to day, seems a pretty static affair, with trees, people and cities on high ground, and oceans, fish and seaweed on low bits. Oceans and mountains are the common metaphors of permanence.

But really, the ocean floor and the continents are utterly different, and all is flux. From mid-ocean volcanic ridges lava flows congeal as immense basalt plates, which move the ocean floors outwards towards the continents. At the edges of oceans the driven plates of basalt pass grudgingly, grindingly, below the eroded sediments of the land, a violent, jerky, unwilling subduction punctuated by tremor and eruption. Immense pressures and temperatures transform benign sediments. This swirl and eddying of surface rock is driven by convection deep in the mantle, as the heat of radioactive decay is transferred to the cooler outer regions.

Where continents bourn on gliding plates impact, the crust rears up in folds, as a towel slid along a table meeting an obstruction. From the pressure cooker below, granitic intrusions rise into the folds — the late, thrust-through, skeletons of mountains. Erosion, fissuring, and migration ensure that what remains to us yields its regularities and predictability only to the most painstaking, sustained and imaginative enquirers.

Fortey lingers affectionately with the men whose chipping away with geological hammers, mapping, fossil hunting and leaps of imagination elucidated the drift, collisions, fusions and fracturing of continents. Their virtuosity is celebrated. Their foibles, whether Teutonic authoritarianism or a fondness for marrying their preferred students, are noted too:

*And how those pioneers could walk ... they thought nothing of covering 30 miles a day of ‘brown heath and shaggy wood’ ... geological maps drawn by heroic foot-sloggers preceded tectonic enlightenment.*

Fortey vividly describes places that typify the dermatology of the planet: the pyroclastic surge that engulfed Pompeii, the linear arrangement of Hawaiian volcanoes testifying to the slow drift of the Pacific plate across a magmatic hot spot, the contorted strata of the Alps, the manic structural complexity of Newfoundland and its neighbourliness, geologically, to north-west Scotland. He dwells as fondly on the human environment of his locations as any travel writer, tying the lives of men to the stuff of the changing ground upon which they transiently perch.

The conclusions of Fortey’s science are always provisional, awaiting revision or refutation by the next wave of observation, the next bold hypothesis. Current uncertainties and past blind alloys are acknowledged. But, the central idea — plate tectonics — is celebrated with gusto, as the key to understanding the glorious complexity of our physical world. This festival of geological science draws on everything from Greek mythology to Häagen-Dasz ice-cream, to bring the slow dance of the plates and the rhythms of millennia into the intellectual compass and sense of self of mortals who live for but a day:

*... the slow stroll of the continents around the globe has been continuous ... for a far longer time than the break up of the last super continent ... The Himalayas will one day be yet another seam on the face of the old earth, another wrinkle added to testify to its character.*

Fortey is a palaeontologist. The planet is about 4500 million years old. Continents have strolled for a little less than 4000 million, and life has left its mark in the rocks for more than 3000 million:

*... life and the earth have evolved together in an intimate collaboration that is a marvel in the galaxy.*

Life, and particularly human life is Fortney’s conscious context. This is geology as Montaigne might have written it. It is early Greece, the Renaissance and the Enlightenment with the measuring and calculating power of now. It is also merely the musing of a smart monkey:

*Mankind is no more than a parasitic tick gorging himself on temporary plenty ... But the present arrangement of land and sea will change, and with it our brief supremacy.*

Quibbles? Well, the question ‘Hang on ... how exactly do you know that?’ is never very far away. The book doesn’t lay open every stage of evidence and argument — that would be too much to ask. Instead it is an overview, and it is fun. I’d have liked a small glossary. The technical terms are not many, but it would be handy to clarify meanings occasionally.

My hunch is that we are lucky enough to be living in changing times. Copernicus and Galileo banished man from the centre of the universe. Newton confirmed that we didn’t need to be there. Which left us a bit unsure of ourselves. Now Darwin, and stuff like this, are giving us back a notion of ourselves, but a very new and different one.

In Fortey’s old rock mill, there is much food for thought.

Alan Munro